

## Missouri Department of Natural Resources

#### PUBLIC NOTICE

APPLICATION FOR MISSOURI STATE OPERATING PERMIT

DATE: September 22, 2006

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed effluent limitations and/or determinations are invited to submit them in writing to the Department of Natural Resources, Northeast Regional Office, 1709 Prospect Drive, Macon, MO 63552, ATTN: G. Irene Crawford, Regional Director. Please include the permit number in all comment letters.

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see <u>Curdt v. Mo. Clean Water</u> Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by October 20, 2006, or received in our office by 5:00 p.m. on October 23, 2006. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <a href="http://www.dnr.mo.gov/env/wpp/index.html">http://www.dnr.mo.gov/env/wpp/index.html</a>, or at the Department of Natural Resources, Northeast Regional Office, 1709 Prospect Drive, Macon, Missouri 63552.

Public Notice Date: September 22, 2006 Permit Number: MO-0083526 Northeast Regional Office						
FACILITY NAME AND ADDRESS	NAME AND ADDRESS OF OWNER					
BCSD, University Estates Old Plank Road and Timberview Drive Columbia, MO 65203	Boone County Regional Sewer District (BCSD) 1314 North 7 <sup>th</sup> Street Columbia, MO 65201					
RECEIVING STREAM & LEGAL DESCRIPTION	TYPE OF DISCHARGE					
Unnamed Tributary to	Domestic, reissuance					
Little Bonne Femme Creek						
(Little Bonne Femme Creek) Sec. 9, T47N, R13W, Boone County						

#### STATE OF MISSOURI

### DEPARTMENT OF NATURAL RESOURCES



## MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 64 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92 Congress) as amended,

MØ-0083526 Permit No. Boone County Regional Sewer District Owner: 1314 N 7<sup>th</sup> Street, Columbia MO 65201 Address: Continuing Authority: Same as above Address: Same as above Facility Name: **BCSD University Estates WWTF** Facility Address: Old Plank Road and Timberview Drive Legal Description: SE1/4, SW1/4, Sec. 9, T47N, R13W, Boone County Receiving Stream: Unnamed tributary to Little Bonne Femme Creek (U) First Classified Stream and ID: Little Bonne Femme Creek (P) (01003) USGS Basin & Sub-watershed No.: (10300102-130001)is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein: **FACILITY DESCRIPTION** Outfall #001 - Subdivision - POTW -SIC #4952 Two-cell lagoon with surface aerator/sludge is retained in lagoon Design population equivalent is 49. Design flow is 4,900 gallons per day. Actual flow is 4,026 gallons per day. Design sludge production is 0.25 dry tons/year. This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law. Effective Date Doyle Childers, Director, Department of Natural Resources Executive Secretary, Clean Water Commission **Expiration Date** G. Irene Crawford, Director, Northeast Regional Office

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 2 of 5

PERMIT NUMBER MO-0083526

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect until October 27, 2011. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT	LINITO	FINAL EFFLUENT LIMITATIONS MONITORING REQUIREMENTS				
PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT SAMPLE FREQUENCY TYPE	
Outfall #001				3		
Flow	MGD	*		*	once/quarter** 24 hr. estimate	
Biochemical Oxygen Demand <sub>5</sub> ***	mg/L	ds 1	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	45	once/quarter** grab	
Total Suspended Solids***	mg/k	130		80	once/quarter** grab	
pH - Units	\ \su\	****		***	once/quarter** grab	
Fecal Coliform(Note 1)	#/100 mL	*		*	once/quarter** grab	
Ammonia as Nitrogen	mg/L	*		*	once/quarter** grab	
Temperature	°C	*		*	once/quarter** grab	

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY THE FIRST REPORT IS DUE \_\_\_\_\_\_. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

#### **B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Parts I & III STANDARD CONDITIONS DATED October 1, 1980 and August 15, 1994, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 3 of 5

PERMIT NUMBER MO-0083526

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective October 27, 2011 and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT	UNITS	FINAL EFFLUENT LIMITATIONS MONITORING REQUIREMENTS				
PARAMETER(S)		DAILY MAXIMUM	WEEKLY AVERAGE	MONTALY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001					A	
Flow	MGD	*		) * \	once/quarter**	
					$\epsilon$	estimate
Biochemical Oxygen Demand <sub>5</sub> ***	mg/L	\$5 \		45	once/quarter**	grab
Total Suspended Solids***	mg/L	2 120		80	once/quarter**	grab
pH - Units	SU	***		***	once/quarter**	grab
Fecal Coliform(Note 1)	100 mL	1000		400	once/quarter**	grab
Ammonia as Nitrogen	mg/L	*		*	once/quarter**	grab
Temperature	°C	*		*	once/quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY THE FIRST REPORT IS DUE \_\_\_\_\_\_. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

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MO 780-0010 (8/91)

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* Sample once per quarter in the months of March, June, September, December.
- \*\*\* This facility is required to meet a removal efficiency of 65% or more. (POTW ONLY)
- \*\*\*\* pH is measured in pH units and is not to be averaged. The pH is to be maintained at or above 6.0 pH units.

Note 1 - Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31.

#### C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) Controls any pollutant not limited in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field.
- 3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
- 4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
  - (1) One hundred micrograms per liter (100 μg/L);
  - (2) Two hundred micrograms per liter (200  $\mu g/L$ ) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu g/L$ ) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
  - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 5. Report as no-discharge when a discharge does not occur during the report period.

#### C. SPECIAL CONDITIONS

- 6. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
  - (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
  - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
  - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, oftensive dor or prevent full maintenance of beneficial uses;
  - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
  - (e) There shall be no significant human health hazard from incidental contact with the water;
  - (f) There shall be no accete toxicity to livestock or wildlife watering;
  - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
  - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- 7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
  - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
  - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

#### D. SCHEDULE OF COMPLIANCE

- 1. The final daily maximum and monthly average Fecal Coliform limits of 400/100ml and 1000/100ml, respectively, shall become effective one day prior to the expiration date of the permit or December 31, 2013, whichever comes first unless items (b) or (c) below are approved by the Department. The Effluent Regulation, 10 CSR 20 7.015(9)(H), allows the permittee up to five years from the issuance date of this permit to:
  - (a) Install disinfection facilities, or;
  - (b) Present an evaluation to show that disinfection is not required to protect one or both recreational uses, or;
  - (c) Present a Use Attainability Analysis (UAA) that demonstrates one or both designated recreational uses are not attainable in the classified waters receiving the effluent.
- 2. If chlorination is the chosen method of disinfection, a Total Residual Chlorine limit will be added to the permit.

Date of Fact Sheet: June 21, 2006

Date of Public Notice: September 22, 2006

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FACT SHEET

This Fact Sheet explains the applicable regulations, rationale for development of this permit and the public

participation process.

NPDES PERMIT NUMBER: MO-0083526

FACILITY NAME: Boone County Regional Sewer District - University Estates WWTF

OWNER NAME: Boone County Regional Sewer District

LOCATION: Sec. 9, T47N, R13W, Boone County

RECEIVING STREAM: Unnamed tributary to Little Bonne Femme

FACILITY CONTACT PERSON: Dwayne Cooksey TELEPHONE: (573) 441-0098

#### FACILITY DESCRIPTION AND RATIONALE

The University Estates Wastewater Treatment Facility is a facultative two-cell lagoon system with one horsepower aerator installed for extra aeration. The plant is designed to treat the waste from a population equivalent of 49 with a design flow of 4,900 gallons per day of domestic wastewater.

The facility discharges treated wastewater into an unnamed tributary to Little Bonne Femme. The discharge point is designated as Outfall #001. Approximately one mile below the discharge points, the flow enters Little Bonne Femme. Little Bonne Femme is listed as a Class P stream. The beneficial uses of the classified portion of the stream include livestock and wildlife watering, protection of warm water aquatic life and human health-fish consumption, and whole body contact recreational category B.

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Permits in Missouri are issued by the Director of the Department of Natural Resources under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). 10 CSR 20-7.031 Missouri Water Quality Standards, Missouri Department of Natural Resources (the Department) "defines the Clean Water Commission's water quality objectives in terms of water uses to be maintained and the criteria to protect those uses.

To protect these beneficial uses and the water quality of the receiving stream, effluent limitations are being established under federal and state laws.

NPDES FACT SHEET MO-0083526 BCRSD – University Estates

## EFFLUENT LIMIT DERIVATION & RATIONALE

The Lagoon Operating Permit Renewal Guidance document signed April 28, 2006, was used to determine final effluent limits.

This operating permit will be issued for a period of five years.